

Use Attainability Analysis

for

WBID 1127 Rainy Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

RECEIVED
JUN 23 2005 PM 3:06
MISSOURI DEPARTMENT OF REVENUE

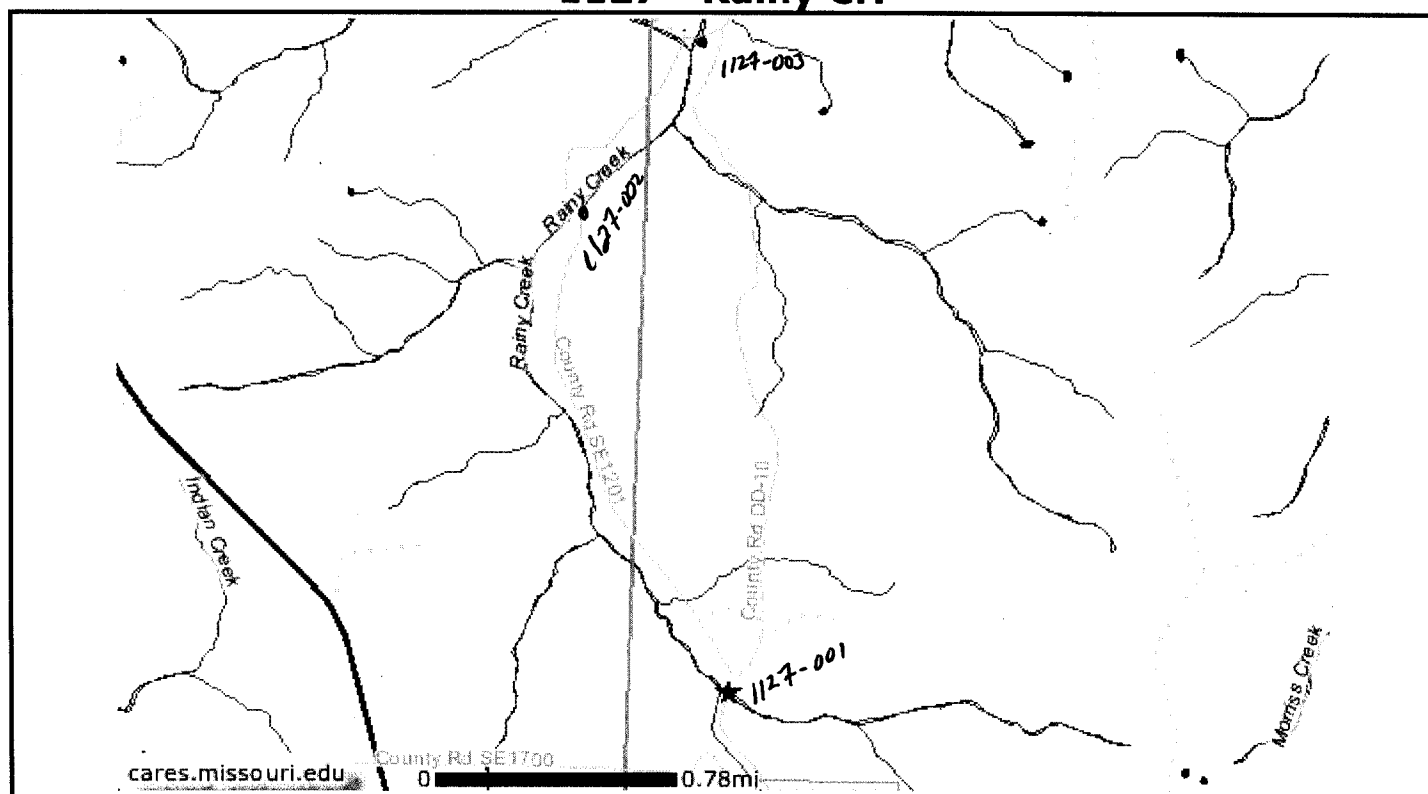
Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	<i>Rainy Cr.</i>
8-digit HUC:	<i>10290109</i>
Missouri WBID #:	<i>1127</i>
County:	<i>Benton/Candlen</i>
Upstream Legal Description:	
Downstream Legal Description:	
Upstream Coordinates:	<i>N 38.10989 W 093.05682</i>
Downstream Coordinates:	<i>N 38.14061 W 093.05825</i>
Discharger Facility Name(s):	<i>Two Days Barbecue</i>
Discharger Permit Number(s):	<i>MO 0110442</i>
Number of Sites Evaluated:	<i>3</i>
Name of Surveyor and Telephone Number:	<i>Aaron Bleibman 816-622-7018</i>
Organization:	<i>MDNR</i>
Position:	<i>Env. Specialist</i>

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: *Aaron Bleibman* Date: *6-23-05*

1127 - Rainy Cr.**Legend****Roads and Highways**

- Interstate
- U.S. Highway
- State Numbered Highway
- State Lettered Highway
- Principal Road
- Road or Street
- Private Road or Drive

County Boundaries**1:24,000 Rivers and Streams**

- Perennial Stream/River
- Intermittent Stream/River
- Artificial Path (Approx. Centerline)
- Undifferentiated Stream/River
- Canal or Ditch
- Other Hydrologic Feature

NHD Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Canal or Ditch
- Artificial Path (Approx. Centerline)
- Other Hydrologic Feature

Incorporated Areas

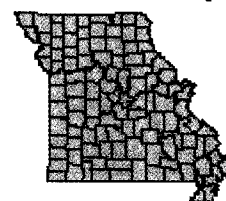
- City
- Town
- Village
- Census Designated Place
- Other

1:24,000 Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- Canal or Ditch
- Other Water Body

NHD Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- Canal or Ditch

Location Map

Map prepared by:
<http://cares.missouri.edu>, 6/27/2005.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 1127-001		Site Location Description: DD-10 rd. NW	
Site GPS Coordinates: N38.10999 W013.05682			
Date & Time: 11:03 AM 6-23-05		Facility Name: Two Days Barbecue	
Personnel: AARON BLEIBAUM <i>Qd.</i>		Permit Number: MO 0110442 <i>Qd</i>	
Current Weather Conditions: Clear, Dry		Weather Conditions for Past 7 days: H.T., Dry	
Photo Ids: Upstream: 7, 8	Downstream: 9, 10	Other:	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

**Aquatic life
wild life
dense vegetation
clear stream**

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Small farm	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1127-001

Stream Morphology:

Upstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>4</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1ft</u>	Max. Depth (ft): <u>1ft</u>
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Estimated (ft ³ /sec): <u>2 ft³/sec</u>	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>7</u>	Length (ft): <u>15</u>	Avg. Depth (ft): <u>1ft</u>	Max. Depth (ft): <u>1.5ft</u>
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Estimated (ft ³ /sec): <u>1A</u>	

Substrate*: (These values should add up to 100%.)

<u>60</u> % Cobble	<u>30</u> % Gravel	<u>10</u> % Sand	% Silt	% Mud/Clay	% Bedrock
--------------------	--------------------	------------------	--------	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>None</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ramon Bleitman Date: 6-23-05
 Organization: MDNR Position: Env. Specialist

1127_001_US



1127_001_US



1127_001_DS



1127_001_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 1127-002	Site Location Description:	
Site GPS Coordinates: N 38.12231 N 093.0531	DD-10N	
Date & Time: 11:23 AM 6-23-05	Facility Name: Two Days Barbecue	
Personnel: Aaron Bleibaum	Permit Number: MO 0110442	
Current Weather Conditions: Hot Dry	Weather Conditions for Past 7 days: Hot, Dry	
Photo Ids: Upstream: 11-15	Downstream: 14-16	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Clear stream
wildlife
Aquatic life
Trees w/ lots of vegetation
Easily accessible

Surrounding Conditions*:

(Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input checked="" type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1127 002

Stream Morphology:

Upstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>7</u>	Length (ft): <u>50</u>	Avg. Depth (ft): <u>1.5ft</u>	Max. Depth (ft): <u>2ft</u>
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>20</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.5ft</u>	Max. Depth (ft): <u>3ft</u>
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Estimated (ft ³ /sec): <u>2 ft³/sec</u>	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>27</u>	Length (ft): <u>60</u>	Avg. Depth (ft): <u>1.5ft</u>	Max. Depth (ft): <u>2ft</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Estimated (ft ³ /sec): <u>1.5 ft³/sec</u>	

Substrate*: (These values should add up to 100%.)

<u>60</u> % Cobble	<u>30</u> % Gravel	<u>10</u> % Sand	% Silt	% Mud/Clay	% Bedrock
--------------------	--------------------	------------------	--------	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

20% pockets of wildflowers + trees on gravel bars Coho line and in middle of stream

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Chris Blehm Date: 6-23-05

Organization: MDNR Position: Env. Specialist

1127_002_US



1127_002_US



1127_002_US



1127_002_DS



1127_002_DS



1127_002_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>1127-003</u>	Site Location Description:	
Site GPS Coordinates: <u>N 38.44062 W 093.05824</u>	<u>Knob Rd</u>	
Date & Time: <u>11:43 AM 6-23-05</u>	Facility Name: <u>Two Days Barbecue</u>	
Personnel: <u>Aaron Ble. Baum</u>	Permit Number: <u>MO 0110942</u>	
Current Weather Conditions: <u>Hot, Dry</u>	Weather Conditions for Past 7 days: <u>Hot, Dry</u>	
Photo Ids: Upstream: <u>17-19</u>	Downstream: <u>20-22</u>	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Small farms/ranches nearby
Aquatic life
Easily accessible

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input checked="" type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1127-003

Stream Morphology:

1. Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>25</u>	Length (ft): <u>50</u>	Avg. Depth (ft): <u>1 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input checked="" type="checkbox"/> Pool	Width (ft): <u>60</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>2 ft</u>	Max. Depth (ft): <u>3 ft</u>
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>2 ft³/sec</u>		

UPstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>15</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>1.5 ft</u>	Max. Depth (ft): <u>2.25 ft</u>
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>48</u>	Length (ft): <u>200</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>3 ft³/sec (Riffle)</u> <u>1.5 ft³/sec pool</u>		

Substrate*: (These values should add up to 100%.)

<u>80</u> % Cobble	<u>10</u> % Gravel	% Sand	% Silt	% Mud/Clay	<u>10</u> % Bedrock
--------------------	--------------------	--------	--------	------------	---------------------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>5% Alga</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ramon Bleiburn Date: 6/23/05
 Organization: MDNR Position: Env. Specialist

1127_003_US



1127_003_US



1127_003_US



1127_003_DS



1127_003_DS



1127_003_DS

